# abcam

## Product datasheet

## Anti-EAAT1 antibody [EPR12686] ab181036



重组 RabMAb

★★★★★ 3 Abreviews 7 References 13 图像

#### 概述

产品名称 Anti-EAAT1抗体[EPR12686]

描述 兔单克隆抗体[EPR12686] to EAAT1

宿主 Rabbit

特异性 Unsuitable for human ICC/IF.

经测试应用 适用于: IHC-P, WB, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Monkey 📤

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse brain, rat brain and human cerebellum lysates. IHC-P: Human, Mouse and Rat

cerebral cortex tissue sections. ICC/IF: Mouse and rat primary neural / glia cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

#### 性能

克隆编号

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

纯度 Protein A purified

克隆 单克隆

EPR12686

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab181036于以下的经测试应用

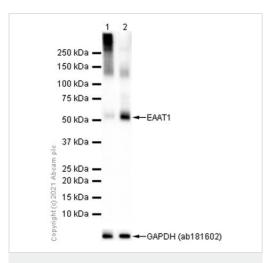
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/50 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/10000. Predicted molecular weight: 59 kDa.
ICC/IF		1/50.

#### 靶标

功能	Transports L-glutamate and also L- and D-aspartate. Essential for terminating the postsynaptic action of glutamate by rapidly removing released glutamate from the synaptic cleft. Acts as a symport by cotransporting sodium.	
组织 <b>特异性</b>	Highly expressed in cerebellum, but also found in frontal cortex, hippocampus and basal ganglia.	
疾病相关	Defects in SLC1A3 are the cause of episodic ataxia type 6 (EA6) [MIM:612656]. EA6 is characterized by episodic ataxia, seizures, migraine and alternating hemiplegia.	
序列相似性	Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A3 subfamily.	
翻译后修饰	Glycosylated.	
细胞定位	Membrane.	

## 图片



Western blot - Anti-EAAT1 antibody [EPR12686] (ab181036)

All lanes: Anti-EAAT1 antibody [EPR12686] (ab181036) at

1/5000 dilution

Lane 1 : Mouse brain lysate boiled

Lane 2 : Mouse brain lysate unboiled

Lysates/proteins at 15 µg per lane.

### **Secondary**

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 59 kDa

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

We recommend not to boil the samples after lysis to get desired WB results.

**All lanes :** Anti-EAAT1 antibody [EPR12686] (ab181036) at 1/5000 dilution

Lane 1: Mouse brain

Lane 2: Mouse hippocampus

Lane 3: Rat hippocampus

Lane 4: Rat brain

Lysates/proteins at 20 µg per lane.

**Secondary** 

All lanes : Anti-Rabbit lgG (HRP), specific to the non-reduced form

of IgG at 1/2000 dilution

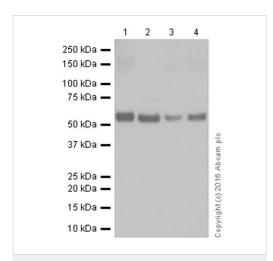
Predicted band size: 59 kDa

Additional bands at: 59 kDa. We are unsure as to the identity of

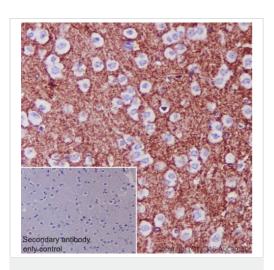
these extra bands.

ab181036 staining EAAT1 in mouse cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at 1/500.

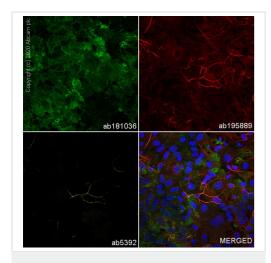
Negative control 1: PBS in place of primary antibody.



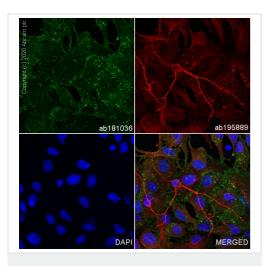
Western blot - Anti-EAAT1 antibody [EPR12686] (ab181036)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EAAT1 antibody
[EPR12686] (ab181036)



Immunocytochemistry/ Immunofluorescence - Anti-EAAT1 antibody [EPR12686] (ab181036)



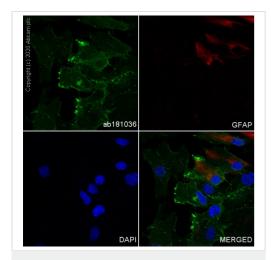
Immunocytochemistry/ Immunofluorescence - Anti-EAAT1 antibody [EPR12686] (ab181036)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neural / glia cells labelling EAAT1 with ab181036 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in rat primary glia cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077**Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1000 2 ug/ml dilution.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural / glia cells labelling EAAT1 with ab181036 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in mouse primary glia cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5 dilution (Red). The Nuclear counterstain was DAPI (Blue).

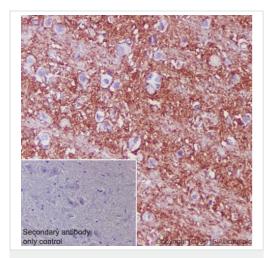
Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1000 2 ug/ml dilution.



Immunocytochemistry/ Immunofluorescence - Anti-EAAT1 antibody [EPR12686] (ab181036)

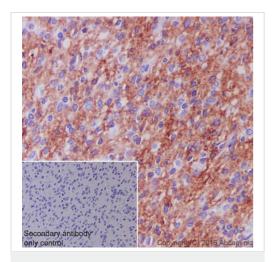
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural / glia cells labelling EAAT1 with ab181036 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing positive staining in mouse primary neural / glia cell. Confocal scanning Z step was set as 0.3  $\mu$ m followed by image processing with maximum Z projection. Anti-Glial Fibrillary Acidic Protein (GFAP) mouse monoclonal antibody was used to counterstain tubulin at 1/100 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is <u>ab150077</u> Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EAAT1 antibody
[EPR12686] (ab181036)

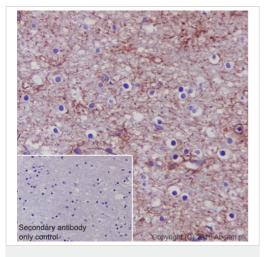
ab181036 staining EAAT1 in rat cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at 1/500.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EAAT1 antibody
[EPR12686] (ab181036)

ab181036 staining EAAT1 in human glioma tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at 1/500.

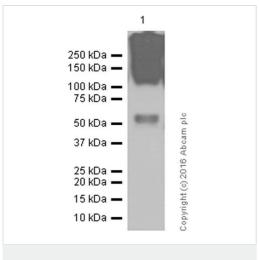
Negative control 1: PBS in place of primary antibody.



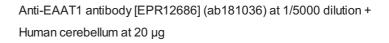
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EAAT1 antibody
[EPR12686] (ab181036)

ab181036 staining EAAT1 in human cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/1000. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at 1/500.

**Negative control 1:** PBS in place of primary antibody.



Western blot - Anti-EAAT1 antibody [EPR12686] (ab181036)



#### **Secondary**

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

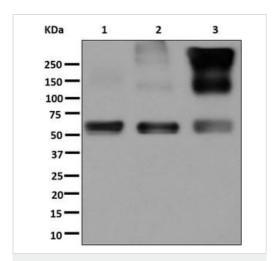
Predicted band size: 59 kDa

Additional bands at: 59 kDa. We are unsure as to the identity of

these extra bands.



The band above (100KDa) is dimer



Western blot - Anti-EAAT1 antibody [EPR12686] (ab181036)

**All lanes :** Anti-EAAT1 antibody [EPR12686] (ab181036) at 1/1000 dilution

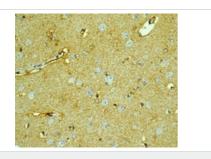
Lane 1: Mouse brain lysate

Lane 2: Rat brain lysate

Lane 3: Human cerebellum lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 59 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EAAT1 antibody
[EPR12686] (ab181036)

Immunohistochemical staining of EAAT1 in paraffin-embedded human brain tissue using ab181036 at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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